PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION International Bureau



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 7: C12N 5/06, 15/79

A1

(11) International Publication Number:

WO 00/09665

(43) International Publication Date:

24 February 2000 (24.02.00)

(21) International Application Number:

PCT/US99/18087

(22) International Filing Date:

10 August 1999 (10.08.99)

(30) Priority Data:

60/096,131

10 August 1998 (10.08.98)

115

(71) Applicant (for all designated States except US): CHIRON CORPORATION [US/US]; 4560 Horton Street, Emeryville, CA 94608 (US).

(72) Inventors; and

- (75) Inventors/Applicants (for US only): WILLIAMS, Lewis, T. [US/US]; 3 Miraflores, Tiburon, CA 94920 (US). GIEDLIN, Martin [US/US]; 370 Redfield Place, Moraga, CA 94556 (US). ESCOBEDO, Jaime [CL/US]; 1470 Livorna Road, Alamo, CA 94507 (US). COLLINS, Amy, L. [US/US]; 236 Bonita Avenue, Piedmont, CA 94611 (US). FONG, Timothy [US/US]; 170 Sandingham South, Moraga, CA 94556 (US).
- (74) Agents: POTTER, Jane, E., R.; Seed and Berry LLP, 6300 Columbia, 701 Fifth Avenue, Seattle, WA 98104-7092 (US) et al.

(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published

With international search report.

Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

(54) Title: ENGINEERED ANTIGEN-PRESENTING CELLS EXPRESSING AN ARRAY OF ANTIGENS AND USES THEREOF

(57) Abstract

The present invention provides a method for presentation of multiple disease associated antigens in antigen-presenting cells which can be used to generate a prophylactic or therapeutic immune response against the disease with which the antigens are associated. The method employs differential screening of nucleic acid sequences expressed by target and non-target cells. By identifying nucleic acid sequences preferentially expressed in a target cell population and expressing the identified sequences in antigen-presenting cells, one can stimulate an immune response directed at a target cell population without being limited to single, previously identified antigens.